

#13  
 Raw Sequence Listing  
 2-20-01 1632 PB

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/348,354A

DATE: 02/20/2001  
 TIME: 15:28:00

Input Set : A:\total sequence.ST25.txt  
 Output Set: N:\CRF3\02202001\I348354A.raw

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 MAR 01 2001  
 TECH CENTER 1600/2900

ENTERED

3 <110> APPLICANT: Havenga, Menzo  
 4       Vogels, Ronald  
 5       Bout, Abraham  
 7 <120> TITLE OF INVENTION: CHIMERIC ADENOVIRUSES  
 9 <130> FILE REFERENCE: 2183-4123US  
 11 <140> CURRENT APPLICATION NUMBER: US 09/348,354A  
 12 <141> CURRENT FILING DATE: 1999-07-07  
 14 <160> NUMBER OF SEQ ID NOS: 84  
 16 <170> SOFTWARE: PatentIn version 3.0  
 18 <210> SEQ ID NO: 1  
 19 <211> LENGTH: 35  
 20 <212> TYPE: DNA  
 21 <213> ORGANISM: Human Adenovirus Oligonucleotide  
 23 <400> SEQUENCE: 1  
 24 cccgtgtatc catatgatgc agacaacgac cgacc 35  
 27 <210> SEQ ID NO: 2  
 28 <211> LENGTH: 27  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Human Adenovirus Oligonucleotide  
 32 <400> SEQUENCE: 2  
 33 cccgtctacc catatggcta cgcgcg 27  
 36 <210> SEQ ID NO: 3  
 37 <211> LENGTH: 27  
 38 <212> TYPE: DNA  
 39 <213> ORGANISM: Human Adenovirus Oligonucleotide  
 41 <400> SEQUENCE: 3  
 42 cckgtstacc catatgaaga tgaaagc 27  
 45 <210> SEQ ID NO: 4  
 46 <211> LENGTH: 31  
 47 <212> TYPE: DNA  
 48 <213> ORGANISM: Human Adenovirus Oligonucleotide  
 50 <400> SEQUENCE: 4  
 51 cccgtctacc catatgacac ctyctcaact c 31  
 54 <210> SEQ ID NO: 5  
 55 <211> LENGTH: 36  
 56 <212> TYPE: DNA  
 57 <213> ORGANISM: Human Adenovirus Oligonucleotide  
 59 <400> SEQUENCE: 5  
 60 cccgtttacc catatgaccc atttgacaca tcagac 36  
 63 <210> SEQ ID NO: 6  
 64 <211> LENGTH: 30  
 65 <212> TYPE: DNA  
 66 <213> ORGANISM: Human Adenovirus Oligonucleotide  
 68 <400> SEQUENCE: 6  
 69 ccgatgcatt tattgttggg ctatatagga 30  
 72 <210> SEQ ID NO: 7  
 73 <211> LENGTH: 30

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74 <212> TYPE: DNA
75 <213> ORGANISM: Human Adenovirus Oligonucleotide
77 <400> SEQUENCE: 7
78 ccgatgcatt yattcttggg cratatagga 30
81 <210> SEQ ID NO: 8
82 <211> LENGTH: 36
83 <212> TYPE: DNA
84 <213> ORGANISM: Human Adenovirus Oligonucleotide
86 <400> SEQUENCE: 8
87 ccgatgcatt tattcttggg raatgtawga aaagga 36
90 <210> SEQ ID NO: 9
91 <211> LENGTH: 30
92 <212> TYPE: DNA
93 <213> ORGANISM: Human Adenovirus Oligonucleotide
95 <400> SEQUENCE: 9
96 ccgatgcatt cagtcattctt ctctgatata 30
99 <210> SEQ ID NO: 10
100 <211> LENGTH: 30
101 <212> TYPE: DNA
102 <213> ORGANISM: Human Adenovirus Oligonucleotide
104 <400> SEQUENCE: 10
105 ccgatgcatt tattgttcag ttatgtagca 30
108 <210> SEQ ID NO: 11
109 <211> LENGTH: 30
110 <212> TYPE: DNA
111 <213> ORGANISM: Human Adenovirus Oligonucleotide
113 <400> SEQUENCE: 11
114 gccatgcatt tattgttctg ttacataaga 30
117 <210> SEQ ID NO: 12
118 <211> LENGTH: 37
119 <212> TYPE: DNA
120 <213> ORGANISM: Human Adenovirus Oligonucleotide
122 <400> SEQUENCE: 12
123 ccgttaatta agcccttatt gttctgttac ataagaa 37
126 <210> SEQ ID NO: 13
127 <211> LENGTH: 30
128 <212> TYPE: DNA
129 <213> ORGANISM: Human Adenovirus Oligonucleotide
131 <400> SEQUENCE: 13
132 ccgatgcatt cagtcattctt ctwtaataata 30
135 <210> SEQ ID NO: 14
136 <211> LENGTH: 377
137 <212> TYPE: PRT
138 <213> ORGANISM: Human Adenovirus 8 Fiber Protein
140 <400> SEQUENCE: 14
142 Ser Cys Ser Cys Pro Ser Ala Pro Thr Ile Phe Met Leu Leu Gln Met
143 1 5 10 15
145 Lys Arg Ala Arg Pro Ser Glu Asp Thr Phe Asn Pro Val Tyr Pro Tyr
146 20 25 30

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148 Gly Tyr Ala Arg Asn Gln Asn Ile Pro Phe Leu Thr Pro Pro Phe Val
149          35          40          45
151 Ser Ser Asn Gly Phe Gln Asn Phe Pro Pro Gly Val Leu Ser Leu Lys
152      50          55          60
154 Leu Ala Asp Pro Ile Thr Ile Asn Asn Gln Asn Val Ser Leu Lys Val
155 65          70          75          80
157 Gly Gly Gly Leu Thr Leu Gln Glu Glu Thr Gly Lys Leu Thr Val Asn
158          85          90          95
160 Thr Glu Pro Pro Leu His Leu Thr Asn Asn Lys Leu Gly Ile Ala Leu
161          100          105          110
163 Asp Ala Pro Phe Asp Val Ile Asp Asn Lys Leu Thr Leu Leu Ala Gly
164          115          120          125
166 His Gly Leu Ser Ile Ile Thr Lys Glu Thr Ser Thr Leu Pro Gly Leu
167          130          135          140
169 Val Asn Thr Leu Val Val Leu Thr Gly Lys Gly Ile Gly Thr Asp Leu
170 145          150          155          160
172 Ser Asn Asn Gly Gly Asn Ile Cys Val Arg Val Gly Glu Gly Gly Gly
173          165          170          175
175 Leu Ser Phe Asn Asp Asn Gly Asp Leu Val Ala Phe Asn Lys Lys Glu
176          180          185          190
178 Asp Lys Arg Thr Leu Trp Thr Thr Pro Asp Thr Ser Pro Asn Cys Arg
179          195          200          205
181 Ile Asp Gln Asp Lys Asp Ser Lys Leu Ser Leu Val Leu Thr Lys Cys
182          210          215          220
184 Gly Ser Gln Ile Leu Ala Asn Val Ser Leu Ile Val Val Ala Gly Arg
185 225          230          235          240
187 Tyr Lys Ile Ile Asn Asn Thr Asn Pro Ala Leu Lys Gly Phe Thr
188          245          250          255
190 Ile Lys Leu Leu Phe Asp Lys Asn Gly Val Leu Met Glu Ser Ser Asn
191          260          265          270
193 Leu Gly Lys Ser Tyr Trp Asn Phe Arg Asn Gln Asn Ser Ile Met Ser
194          275          280          285
196 Thr Ala Tyr Glu Lys Ala Ile Gly Phe Met Pro Asn Leu Val Ala Tyr
197          290          295          300
199 Pro Lys Pro Thr Thr Gly Ser Lys Lys Tyr Ala Arg Asp Ile Val Tyr
200 305          310          315          320
202 Gly Asn Ile Tyr Leu Gly Gly Lys Pro His Gln Pro Val Thr Ile Lys
203          325          330          335
205 Thr Thr Phe Asn Gln Glu Thr Gly Cys Glu Tyr Ser Ile Thr Phe Asp
206          340          345          350
208 Phe Ser Trp Ala Lys Thr Tyr Val Asn Val Glu Phe Glu Thr Thr Ser
209          355          360          365
211 Phe Thr Phe Ser Tyr Ile Ala Gln Glu
212          370          375
214 <210> SEQ ID NO: 15
215 <211> LENGTH: 376
216 <212> TYPE: PRT
217 <213> ORGANISM: Human Adenovirus 9 Fiber Protein
219 <400> SEQUENCE: 15

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```

221 Ser Cys Ser Cys Pro Ser Ala Pro Thr Ile Phe Met Leu Leu Gln Met
222 1 5 10 15
224 Lys Arg Ala Arg Pro Ser Glu Asp Thr Phe Asn Pro Val Tyr Pro Tyr
225 20 25 30
227 Gly Tyr Ala Arg Asn Gln Asn Ile Pro Phe Leu Thr Pro Pro Phe Val
228 35 40 45
230 Ser Ser Asp Gly Phe Gln Asn Phe Pro Pro Gly Val Leu Ser Leu Lys
231 50 55 60
233 Leu Ala Asp Pro Ile Ala Ile Val Asn Gly Asn Val Ser Leu Lys Val
234 65 70 75 80
236 Gly Gly Gly Leu Thr Leu Gln Asp Gly Thr Gly Lys Leu Thr Val Asn
237 85 90 95
239 Ala Asp Pro Pro Leu Gln Leu Thr Asn Asn Lys Leu Gly Ile Ala Leu
240 100 105 110
242 Asp Ala Pro Phe Asp Val Ile Asp Lys Leu Thr Leu Leu Ala Gly His
243 115 120 125
245 Gly Leu Ser Ile Ile Thr Lys Glu Thr Ser Thr Leu Pro Gly Leu Ile
246 130 135 140
248 Asn Thr Leu Val Val Leu Thr Gly Lys Gly Ile Gly Thr Glu Ser Thr
249 145 150 155 160
251 Asp Asn Gly Gly Ser Val Cys Val Arg Val Gly Glu Gly Gly Gly Leu
252 165 170 175
254 Ser Phe Asn Asn Asp Gly Asp Leu Val Ala Phe Asn Lys Lys Glu Asp
255 180 185 190
257 Lys Arg Thr Leu Trp Thr Thr Pro Asp Thr Ser Pro Asn Cys Lys Ile
258 195 200 205
260 Asp Gln Asp Lys Asp Ser Lys Leu Thr Leu Val Leu Thr Lys Cys Gly
261 210 215 220
263 Ser Gln Ile Leu Ala Asn Val Ser Leu Ile Val Val Ala Gly Lys Tyr
264 225 230 235 240
266 Lys Ile Ile Asn Asn Asn Thr Gln Pro Ala Leu Lys Gly Phe Thr Ile
267 245 250 255
269 Lys Leu Leu Phe Asp Glu Asn Gly Val Leu Met Glu Ser Ser Asn Leu
270 260 265 270
272 Gly Lys Ser Tyr Trp Asn Phe Arg Asn Glu Asn Ser Ile Met Ser Thr
273 275 280 285
275 Ala Tyr Glu Lys Ala Ile Gly Phe Met Pro Asn Leu Val Ala Tyr Pro
276 290 295 300
278 Lys Pro Thr Ala Gly Ser Lys Lys Tyr Ala Arg Asp Ile Val Tyr Gly
279 305 310 315 320
281 Asn Ile Tyr Leu Gly Gly Lys Pro Asp Gln Pro Val Thr Ile Lys Thr
282 325 330 335
284 Thr Phe Asn Gln Glu Thr Gly Cys Glu Tyr Ser Ile Thr Phe Asp Phe
285 340 345 350
287 Ser Trp Ala Lys Thr Tyr Val Asn Val Glu Phe Glu Thr Thr Ser Phe
288 355 360 365
290 Thr Phe Ser Tyr Ile Ala Gln Glu
291 370 375
293 <210> SEQ ID NO: 16

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Input Set : A:\total sequence.ST25.txt  
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294 <211> LENGTH: 391
295 <212> TYPE: PRT
296 <213> ORGANISM: Human Adenovirus 13 Fiber Protein
298 <220> FEATURE:
W--> 299 <221> NAME/KEY: Xaa
300 <222> LOCATION: (1)..(385)
301 <223> OTHER INFORMATION: Can be any amino acid
304 <400> SEQUENCE: 16
W--> 306 Xaa Xaa Xaa Xaa Xaa Ser Ala Pro Thr Ile Phe Met Leu Leu Gln Met
307 1 5 10 15
W--> 309 Lys Arg Ala Arg Ser Ser Xaa Asp Thr Phe Asn Pro Val Tyr Pro Tyr
310 20 25 30
W--> 312 Gly Tyr Ala Arg Asn Gln Asn Ile Xaa Phe Xaa Thr Pro Pro Phe Val
313 35 40 45
W--> 315 Xaa Ser Asp Gly Phe Lys Asn Phe Pro Pro Gly Val Leu Ser Leu Lys
316 50 55 60
318 Leu Ala Asp Pro Ile Thr Ile Ala Asn Gly Asp Val Ser Leu Lys Val
319 65 70 75 80
321 Gly Gly Gly Leu Thr Leu Gln Glu Gly Ser Leu Thr Val Asp Pro Lys
322 85 90 95
324 Ala Pro Leu Gln Leu Ala Asn Asp Lys Lys Leu Glu Leu Val Tyr Asp
325 100 105 110
327 Asp Pro Phe Glu Val Ser Thr Asn Lys Leu Ser Leu Lys Val Gly His
328 115 120 125
330 Gly Leu Lys Val Leu Asp Asp Lys Ser Ala Gly Gly Leu Lys Asp Leu
331 130 135 140
333 Ile Gly Lys Leu Val Val Leu Thr Gly Lys Gly Ile Gly Ile Glu Asn
334 145 150 155 160
336 Leu Gln Asn Asp Asp Gly Ser Ser Arg Gly Val Gly Ile Asn Val Arg
337 165 170 175
339 Leu Gly Thr Asp Gly Gly Leu Ser Phe Asp Arg Lys Gly Glu Leu Val
340 180 185 190
342 Ala Trp Asn Arg Lys Asp Asp Arg Arg Thr Leu Trp Thr Thr Pro Asp
343 195 200 205
345 Pro Ser Pro Asn Cys Lys Ala Glu Thr Glu Lys Asp Ser Lys Leu Thr
346 210 215 220
348 Leu Val Leu Thr Lys Cys Gly Ser Gln Ile Leu Ala Thr Val Ser Ile
349 225 230 235 240
351 Ile Val Leu Lys Gly Lys Tyr Glu Phe Val Lys Lys Glu Thr Glu Pro
352 245 250 255
354 Lys Ser Phe Asp Val Lys Leu Leu Phe Asp Ser Lys Gly Val Leu Leu
355 260 265 270
357 Pro Thr Ser Asn Leu Ser Lys Glu Tyr Trp Asn Tyr Arg Ser Tyr Asp
358 275 280 285
360 Asn Asn Ile Gly Thr Pro Tyr Glu Asn Ala Val Pro Phe Met Pro Asn
361 290 295 300
363 Leu Lys Ala Tyr Pro Lys Pro Thr Lys Thr Ala Ser Asp Lys Ala Glu
364 305 310 315 320
366 Asn Lys Ile Ser Ser Ala Lys Asn Lys Ile Val Ser Asn Phe Tyr Phe

```

FYI

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

## VERIFICATION SUMMARY

DATE: 02/20/2001

PATENT APPLICATION: US/09/348,354A

TIME: 15:28:11

Input Set : A:\total sequence.ST25.txt

Output Set: N:\CRF3\02202001\I348354A.raw

L:299 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16  
L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:679 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:21  
L:710 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
L:986 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:25  
L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:1002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:1011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:1020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:1026 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:1545 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:32  
L:1558 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:1561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:1570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:1585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:1706 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:34  
L:1755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
L:1791 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:35  
L:1798 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:1840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:2241 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:41  
L:2296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41